de Haardt ELECTRONIC ENGINEERING

Xtra.Mini Remote Control

Our low cost Xtra.Mini Remote Control gives you the possibility to futher extend the safety on your track. This car opener size mini Remote Control has only 3 buttons which are fully programmable with multiple functions.

The Xtra.Mini Remote is supplied including a pull reel and carabiner, making it very easy to carry around the track.

Programming a button with a function :

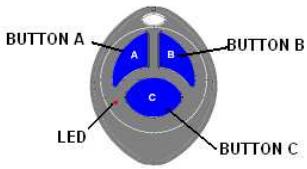
When you want to program functions to a button, you have to look in the appendix how to enter the programming mode (Appendix 1) for the button, and look for the keyCode (Appendix 2) of the functions.

For example you want to program button A with 2 functions (Slow all fuel karts down to speed 1 , and at the same time you want to turn on the yellow light :

Enter programming mode	Button to be pressed at the same time
For Button A (Appendix 1)	Press button B and C at the same time

Function description	KeyCode
All Fuel karts speed 1 (Appendix 2)	BACCA
Turn yellow lights on, Red & Green Light Off (Apendix 2)	CBABA

Step3 : Now you have collected all the information to program the functions to a button, carry out the programming :



- To start programming button A, press button B and C together until the LED blinks once.
- Enter the keycode of the first command by pressing the appropriate 5 buttons one after the other. The red LED blinks twice to indicate that the next keycode may be entered.
- Enter the keycode of the 2nd command by pressing the appropriate 5 buttons one after the other. The red LED blinks three times to indicate that the next keycode may be entered.
- To finish the programming, press button B and C together until the LED blinks 8 times.

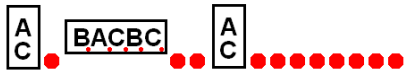
Programming mode is exited after 10 seconds of button inactivity. The red LED blinks once and no changes are made. If a mistake was made during programming, leave the Xtra.Remote Control alone for ten seconds and wait for the red LED to blink once.

2nd Example :

In this 2nd example is shown how to program ALL KARTS SPEED 4 to button B :

Enter programming mode	Button to be pressed at the same time
For Button B	Press button A and C at the same time

Function description	KeyCode
ALL FUEL KARTS SPEED 4	BACBC



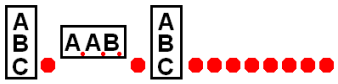
- To start programming button B, press button A and C together until the LED blinks once.
- Enter the keycode of the first command by pressing the appropriate 5 buttons one after the other. The red LED blinks twice to indicate that the next keycode may be entered.
- To finish the programming, press button A and C together until the LED blinks 8 times.

Programming tracks (Only for karting centres with multiple tracks)

By default all four tracks are selected. To change the track settings proceed as follows:

Enter programming mode	Button to be pressed at the same time
To program TRACKS	Press button A, B and C at the same time

Function description	KeyCode
Select TRACK A	AAB



1. To start programming the required tracks, press button A, B and C together until the LED blinks once.
2. Enter the KeyCode of the required track combination by pressing the 3 appropriate buttons one after the. See Annex 3 for a list.
3. To finish the programming, press button A, B and C together until the LED blinks 8 times.

Operating range

The operating range of the Xtra.Mini Remote Control differs depending on user, the way transmotter is held, location and other conditions. In case you are not able to controll your full track, we suggest to use our Xtra.Range Extender/Accesspoint.

Appendix 1 , Entering programming mode

Enter programming mode	Buttons to be pressed at the same time
To select Tracks	Button A + B + C
To program Button A	Button B + C
To program Button B	Button A + C
To program Button C	Button A + B

Appendix 2 , Button functions and KeyCodes

KeyCode	Description	KeyCode	Description	KeyCode	Description
BACAB	All karts stop	BCACC	Sector 4 Speed 3 (EV)	CACCA	Sector 8 Speed 2 (FUEL)
BACAC	All karts Speed 1 (EV)	BCBAA	Sector 4 Speed 4	CACCB	Sector 8 Speed 3 (FUEL)
BACBA	All karts Speed 2 (EV)	BCBAB	Sector 4 Speed 1 fuel	CBAAB	Lights: none
BACBB	All karts Speed 3 (EV)	BCBAC	Sector 4 Speed 2 fuel	CBAAC	Lights: red
BACBC	All karts Speed 4	BCBBA	Sector 4 Speed 3 fuel	CBABA	Lights: yellow
BACCA	All karts Speed 1 (FUEL)	BCBCA	Sector 5 stop	CBABB	Lights: green
BACCB	All karts Speed 2 (FUEL)	BCBCB	Sector 5 Speed 1 (EV)	CBABC	Lights: red+yellow
BACCC	All karts Speed 3 (FUEL)	BCBCC	Sector 5 Speed 2 (EV)	CBACA	Lights: red+green
BBAAC	Sector 1 stop	BCCAA	Sector 5 Speed 3 (EV)	CBACB	Lights: yellow+green
BBABA	Sector 1 Speed 1 (EV)	BCCAB	Sector 5 Speed 4	CBACC	Lights: red+yellow+green
BBABB	Sector 1 Speed 2 (EV)	BCCAC	Sector 5 Speed 1 (FUEL)	CBCBA	All corner lights off
BBABC	Sector 1 Speed 3 (EV)	BCCBA	Sector 5 Speed 2 (FUEL)	CBCBC	All corner lights on
BBACA	Sector 1 Speed 4	BCCBB	Sector 5 Speed 3 (FUEL)	CBCCA	Corner light 1 off
BBACB	Sector 1 Speed 1 (FUEL)	BCCCB	Sector 6 stop	CBCCC	Corner light 1 on
BBACC	Sector 1 Speed 2 (FUEL)	BCCCC	Sector 6 Speed 1 (EV)	CCAAA	Corner light 2 off
BBBAA	Sector 1 Speed 3 (FUEL)	CAAAA	Sector 6 Speed 2 (EV)	CCAAC	Corner light 2 on
BBBBA	Sector 2 stop	CAAAB	Sector 6 Speed 3 (EV)	CCABA	Corner light 3 off
BBBBB	Sector 2 Speed 1 (EV)	CAAAC	Sector 6 Speed 4	CCABC	Corner light 3 on
BBBBC	Sector 2 Speed 2 (EV)	CAABA	Sector 6 Speed 1 (FUEL)	CCACA	Corner light 4 off
BBBCA	Sector 2 Speed 3 (EV)	CAABB	Sector 6 Speed 2 (FUEL)	CCACC	Corner light 4 on
BBBCB	Sector 2 Speed 4	CAABC	Sector 6 Speed 3 (FUEL)	CCBAA	Corner light 5 off
BBBCC	Sector 2 Speed 1 (FUEL)	CAACC	Sector 7 stop	CCBAC	Corner light 5 on
BBCAA	Sector 2 Speed 2 (FUEL)	CABAA	Sector 7 Speed 1 (EV)	CCBBA	Corner light 6 off
BBCAB	Sector 2 Speed 3 (FUEL)	CABAB	Sector 7 Speed 2 (EV)	CCBBC	Corner light 6 on
BBCBB	Sector 3 stop	CABAC	Sector 7 Speed 3 (EV)	CCBCA	Corner light 7 off
BBCBC	Sector 3 Speed 1 (EV)	CABBA	Sector 7 Speed 4	CCBCC	Corner light 7 on
BBCCA	Sector 3 Speed 2 (EV)	CABBB	Sector 7 Speed 1 (FUEL)	CCCAA	Corner light 8 off
BBCCB	Sector 3 Speed 3 (EV)	CABBC	Sector 7 Speed 2 (FUEL)	CCCAC	Corner light 8 on
BBCCC	Sector 3 Speed 4	CABCA	Sector 7 Speed 3 (FUEL)	CCCCA	Trigger command 0
BCAAA	Sector 3 Speed 1 (FUEL)	CACAA	Sector 8 stop	CCCCB	Trigger command 1
BCAAB	Sector 3 Speed 2 (FUEL)	CACAB	Sector 8 Speed 1 (EV)	CCCCC	Trigger command 2
BCAAC	Sector 3 Speed 3 (FUEL)	CACAC	Sector 8 Speed 2 (EV)		
BCABC	Sector 4 stop	CACBA	Sector 8 Speed 3 (EV)		
BCACA	Sector 4 Speed 1 (EV)	CACBB	Sector 8 Speed 4		
BCACB	Sector 4 Speed 2 (EV)	CACBC	Sector 8 Speed 1 (FUEL)		

Color	Explanation
	The green colored cells are commands used only for FUEL karts
	The Yellow colored cells are commands used only for Electric Vehicles / Karts
	The white colored cells can be used for both types of karts

Appendix 3 , Selectable tracks and KeyCodes

KeyCode	Tracks	KeyCode	Tracks	KeyCode	Tracks	KeyCode	Tracks
AAB	A	ABC	A+B	BAA	B+D	BBB	A+C+D
AAC	B	ACA	A+C	BAB	C+D	BBC	B+C+D
ABA	C	ACB	A+D	BAC	A+B+C	BCA	A+B+C+D (default)
ABB	D	ACC	B+C	BBA	A+B+D		

Appendix 4, Specifications

Buttons	3 individually programmable
Tracks	Any combination of 4 tracks
Function assignment	Each button can be assigned up to 4 functions
Speed limit control (FUEL) karts (all karts only)	Stop, 2100, 3000, 4000 RPM, no limit
Speed limit control (EV)tro karts (all karts only)	Stop, Speed 1, 2, 3, no limit
Sector Speed limit control (FUEL) karts (sector 1 – 8 only)	Stop, 2100, 3000, 4000 RPM, no limit
Sector Speed limit control (EV)tro karts (sector 1 – 8 only)	Stop, Speed 1, 2, 3, no limit
Traffic, race light control	Any combination of 3 lights
Corner light control (corner light 1 – 8 only)	On / off
Trigger commands for access point interface (Xtra.Range Extender)	3
Additional commands	On request
Indicator	Low power LED
Operation range	30 m
Batteries	1 x CR2430 lithium coin cell
Dimensions (LxWxT)	55 x 45 x 15 mm
Weight	20g including batteries
Operation temperature	0 … +55 degrees Celsius
Operation humidity	Max 85% relative

Appendix 5, Warrenty

1. De Haardt Electronic Engineering BV guarantees for 12 months after delivery of the goods sold or provided for use that:
   - the goods can perform the tasks stated in the manuals, descriptions and documentation;

2. The liability under the guarantee contained in this article is limited at De Haardt Electronic Engineering BV's choice to remedying material and manufacturing faults free of charge in De Haardt Electronic Engineering BV's own workshop, supplying new parts free of charge and taking back and acquiring the ownership of the non-functioning parts, or applying a price reduction by agreement with the other party on the goods supplied or provided for use. De Haardt Electronic Engineering BV cannot under any circumstances be obliged to come to the location of the delivered goods to establish defects claimed by the other party. Equally, De Haardt Electronic Engineering BV cannot be compelled to carry out repair work outside its own workshop.

3. The guarantee referred to in the third paragraph does not cover the costs of disassembly, labour costs, transport costs and call-out charges, all in the most general sense. These costs will be charged in all cases.

4. No guarantee is provided if:
   changes have been made to the goods supplied by or provided for use by De Haardt Electronic Engineering BV other than by De Haardt Electronic Engineering BV itself or persons expressly authorized by De Haardt Electronic Engineering BV, unless De Haardt Electronic Engineering BV has agreed in writing to such changes in advance;
   the defects in the goods supplied or provided for use by De Haardt Electronic Engineering BV are the result of:
   neglect of the maintenance of the goods supplied or provided for use by the other party or other users;
   improper use or use not in accordance with the instructions supplied by De Haardt Electronic Engineering BV for the installation of the goods;
   incompetent use and/or misuse of the goods supplied or provided for use by the other party or other users;
   wear and tear;
   repairs or replacements carried out by persons other than those expressly authorized to do so by De Haardt Electronic Engineering BV, unless De Haardt Electronic Engineering BV has agreed in writing to such repairs or replacements in advance

5. Work not covered by the guarantee as referred to in this article shall be charged to the other party in accordance with De Haardt Electronic Engineering BV's relevant current tariffs.

6. Notwithstanding the provisions in the preceding paragraphs, the guarantee provided by De Haardt Electronic Engineering BV does not go beyond any guarantee provided to De Haardt Electronic Engineering BV by the relevant manufacturer or supplier of the hardware and/or software and fulfilled in respect of De Haardt Electronic Engineering BV. De Haardt Electronic Engineering BV shall on the other party's request inform the latter of the content of the contracts entered into between De Haardt and its suppliers.